

REMARKS

Claims 1, 4, 5, and 7-9 are now pending in this application for which applicants seek reconsideration.

Amendment

Claims 1 and 5 have been amended to improve their form and readability to overcome the § 112 rejection. New claims 8 and 9 have been added. See at least paragraph 52 of corresponding USPGP 2006/0039803 for support. No new matter has been introduced.

Art Rejection

Claims 1 and 5 were rejected under 35 U.S.C. § 103(a) as unpatentable over Katayama (JP 2003-42064), which corresponds to prior art Fig. 7 of the present disclosure, in view of Lee (USP 6,446,454). Claims 4 and 7 were rejected under § 103(a) as unpatentable over Katayama in view of Lee and Ono (USP 6,155,067).

Applicants previously explained that Lee would not have disclosed or taught a blocked sealed space to reduce sound transmission. The examiner acknowledged that Katayama does not disclose the claimed integrally formed fixed sound-insulating wall located confronting both the first and second path openings and forming a blocked sealed space. The examiner, however, is now relying on Lee's wall (instead of the vibration plate 42) that forms a Helmholtz resonator (blocked sealed space) 28 (see Fig. 3-5; column 2, lines 8-9) for attenuating noise of a specific frequency. Applicants submit that Lee's teachings would not have lead to the claimed invention, but rather to using the movable vibration plate to baffle pulsations emanating from its compressing room.

Lee's fixed wall indeed confronts the openings of the communication paths 22, 25. But the claims call for a suction valve disposed at the opening of the compressing room (e.g., 122) and a first communicating path (e.g., 145) directly communicating with the suction valve (e.g., 134) disposed at the compressing room opening. The first path opening (e.g., 145a) of the first communication path faces the sound-insulating wall. Therefore, the pressure pulsation (sound transmission) emanating from the compressing room exits through the first path opening (in the direction opposite of the refrigerant gas flow) and then collides with the sound-insulating wall (e.g., 151), which suppresses noise. See paragraph 52 of the corresponding publication USPGP 2006/0039803. In other words, the structure of the first communication path allows the pressure pulsation to collide directly with the sound-insulating wall, which is integrated with the

outer wall of the suction muffler body to reinforce the strength of the wall, thereby preventing excessive vibration due to pressure pulsation in the suction muffler.

Lee's two communication paths 22 and 25 indeed face the fixed lower wall, but these paths do not communicate directly with the compressing room. Indeed, Lee's refrigerant supply tube 26, which is located between the communication path 22 and the communication path 25, communicates directly with the compressing room. Thus, the claimed first communication path (e.g., 145) corresponds to Lee's communication path 26, which does not face the fixed lower wall, and not the communication path 22 or 25. Lee's communication path 26 faces the movable vibration plate 42 and not the fixed lower wall.

Accordingly, while Lee's fixed lower wall can reinforce the frame of the suction muffler body 200, the pressure pulsation from the compressing room cannot be suppressed with the fixed lower wall as it does not face the communication path that communicates with the compressing room. Lee explicitly teaches using the vibration plate 42 to suppress the pressure pulsation from the compressing room. The combination urged by the examiner thus would have expressly taught using a vibration plate 42 to suppress the pressure pulsation from the compression room, and would have taught away from using a fixed wall.

According to the present invention, a sound-insulating wall, which can be a simple structure that is less complicated than that of Lee's vibration plate, suppresses the pressure pulsation from the compressing room, while reinforcing the outer wall. With the claimed structure, results superior to Lee can be achieved.

Conclusion

Applicants submit that the pending claims patentably distinguish over the applied references and are in condition for allowance. Should the examiner have any issues concerning this reply or any other outstanding issues remaining in this application, applicants urge the examiner to contact the undersigned to expedite prosecution.

Respectfully submitted,

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DATE

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